

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/669,162C  
Source: 1FW16  
Date Processed by STIC: 11/10/04

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 11/10/2004

PATENT APPLICATION: US/10/669,162C

TIME: 12:36:24

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\11102004\J669162C.raw

3 <110> APPLICANT: Breaker, Ronald R.  
 4 Nahvi, Ali  
 5 Sudarsan, Narasimhan  
 6 Ebert, Margaret S.  
 7 Winkler, Wade  
 8 Barrick, Jeffrey E.  
 9 Wickiser, John K.  
 11 <120> TITLE OF INVENTION: RIBOSWITCHES, METHODS FOR THEIR USE, AND  
 12 COMPOSITIONS FOR USE WITH RIBOSWITCHES  
 14 <130> FILE REFERENCE: 25006.0016U2  
 16 <140> CURRENT APPLICATION NUMBER: 10/669,162C  
 17 <141> CURRENT FILING DATE: 2003-09-22  
 19 <150> PRIOR APPLICATION NUMBER: 60/412,468  
 20 <151> PRIOR FILING DATE: 2002-09-20  
 22 <160> NUMBER OF SEQ ID NOS: 410  
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 202  
 28 <212> TYPE: RNA  
 29 <213> ORGANISM: Escherichia coli  
 31 <400> SEQUENCE: 1  
 32 gccgguccug ugaguuaaua gggaauccag ugcgaaucug gagcugacgc gcagcgguaa 60  
 33 ggaaaggugc gaugauugcg uuaugcggac acugccauuc ggugggaagu caucaucucu 120  
 34 uaguaucuaa gauacccuc caagcccgaa gaccugccgg ccaacgucgc aucugguucu 180  
 35 caucaucgcg uaauauugau ga 202  
 37 <210> SEQ ID NO: 2  
 38 <211> LENGTH: 165  
 39 <212> TYPE: RNA  
 40 <213> ORGANISM: Escherichia coli  
 42 <220> FEATURE:  
 43 <221> NAME/KEY: misc\_feature  
 44 <222> LOCATION: 155  
 45 <223> OTHER INFORMATION: r = a or g  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: misc\_feature  
 49 <222> LOCATION: 157  
 50 <223> OTHER INFORMATION: y = c or u  
 52 <400> SEQUENCE: 2  
 53 ggaaccaaac gacucggggu gccuucugc gugaaggcug agaaauaccg guaucaccug 60  
 54 aucuggauaa ugccagcgua gggaagucac ggaccaccag gucauugcuu cuucacguua 120  
 55 uggcaggagc aaacuaugca agucgaccug cuggruycag cgcaa 165  
 58 <210> SEQ ID NO: 3  
 59 <211> LENGTH: 240

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60 <212> TYPE: RNA
61 <213> ORGANISM: Escherichia coli
63 <220> FEATURE:
64 <221> NAME/KEY: misc_feature
65 <222> LOCATION: 155-240
66 <223> OTHER INFORMATION: n = g, a, c or u
68 <400> SEQUENCE: 3
69 ggaaugcccc auuugcgggg cuaauuucuu gucggagugc cuuacuggc ugagaccguu 60
70 uauucgggau ccgcggaacc ugaucaggcu aaucugcg aagggaacaa gaguuaaucu 120
W--> 71 gcuaucgau cgcgcugcg gcgaucgucu cuugnnnnnn nnnnnnnnnn nnnnnnnnnn 180
W--> 72 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
74 <210> SEQ ID NO: 4
75 <211> LENGTH: 165
76 <212> TYPE: RNA
77 <213> ORGANISM: Escherichia coli
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: 65, 74, 107, 130
82 <223> OTHER INFORMATION: s = g or c
84 <220> FEATURE:
85 <221> NAME/KEY: misc_feature
86 <222> LOCATION: 25, 26, 34, 35, 64, 75, 106, 131
87 <223> OTHER INFORMATION: w = a or u
89 <400> SEQUENCE: 4
90 ggaaccaaac gacucggggg gcccwwcugc gugwggcug agaaauaccc guaucaccug 60
91 aucwsgauaa ugcswgcgua gggaagucac ggaccaccag gucauwscuu cuucacguua 120
92 uggcaggags waacuaugca agucgaccug cuggauccag cgcaa 165
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 176
96 <212> TYPE: RNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
101     synthetic construct
103 <220> FEATURE:
104 <221> NAME/KEY: misc_feature
105 <222> LOCATION: 39-156
106 <223> OTHER INFORMATION: n = g, a, c or u
108 <400> SEQUENCE: 5
W--> 109 ggauaaauagc cguagguugc gaaagcgacc cugaguagnn nnnnncaaga gaagcagagg 60
110 gacuggcccg acgaagcuuc agcaaccggu guaauggcga ucagccauga ccaaggugcu 120
W--> 111 aaauccagca agcucgaaca gcuuggaagn nnnnnncgaa acgguagcga gaggcuc 176
115 <210> SEQ ID NO: 6
116 <211> LENGTH: 4
117 <212> TYPE: RNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
122     synthetic construct

```

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```

124 <220> FEATURE:
125 <221> NAME/KEY: misc_feature
126 <222> LOCATION: 4
127 <223> OTHER INFORMATION: n = g, a, c or u
129 <400> SEQUENCE: 6
W--> 130 ggun 4
132 <210> SEQ ID NO: 7
133 <211> LENGTH: 6
134 <212> TYPE: RNA
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
139     synthetic construct
141 <220> FEATURE:
142 <221> NAME/KEY: misc_feature
143 <222> LOCATION: 6
144 <223> OTHER INFORMATION: d = g, a or u
146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature
148 <222> LOCATION: 1-4
149 <223> OTHER INFORMATION: n = g, a, c or u
151 <400> SEQUENCE: 7
W--> 152 nnnngd 6
154 <210> SEQ ID NO: 8
155 <211> LENGTH: 36
156 <212> TYPE: RNA
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
161     synthetic construct
163 <220> FEATURE:
164 <221> NAME/KEY: misc_feature
165 <222> LOCATION: 11, 17, 20, 25, 36
166 <223> OTHER INFORMATION: n = g, a, c or u
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: 6, 35
171 <223> OTHER INFORMATION: r = a or g
W--> 172 <220> FEATURE:
173 <221> NAME/KEY: misc_feature
174 <222> LOCATION: 1-3, 15, 31
175 <223> OTHER INFORMATION: y = c or u
177 <400> SEQUENCE: 8
W--> 179 yyyucrgggc nggggygnaan ucccnaccgg yggurn 36
181 <210> SEQ ID NO: 9
182 <211> LENGTH: 51
183 <212> TYPE: RNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:

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187 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
188     synthetic construct
190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: 1, 7-9, 13, 14, 16, 18, 25, 26, 32, 33, 37, 39, 42, 43, 50,
193     51
194 <223> OTHER INFORMATION: n = g, a, c or u
196 <220> FEATURE:
197 <221> NAME/KEY: misc_feature
198 <222> LOCATION: 38, 44
199 <223> OTHER INFORMATION: r = a or g
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: 17, 34/
204 <223> OTHER INFORMATION: y = c or u
206 <400> SEQUENCE: 9
W--> 207 ncuuaunng agnngnynga gggannggcc cnyganrnc cnnrgcaacn n 51
209 <210> SEQ ID NO: 10
210 <211> LENGTH: 69
211 <212> TYPE: RNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
216     synthetic construct
218 <220> FEATURE:
219 <221> NAME/KEY: misc_feature
220 <222> LOCATION: 1, 2, 10-17, 22, 25-31, 34, 40-46, 54-60, 68, 69
221 <223> OTHER INFORMATION: n = g, a, c or u
223 <220> FEATURE:
224 <221> NAME/KEY: misc_feature
225 <222> LOCATION: 8, 18, 67
226 <223> OTHER INFORMATION: r = a or g
230 <220> FEATURE:
231 <221> NAME/KEY: misc_feature
232 <222> LOCATION: 65
233 <223> OTHER INFORMATION: y = c or u
235 <400> SEQUENCE: 10
W--> 236 nnucruauan nnnnnnnrau anggnnnnnn ngunucuacn nnnnnnccgu aaannnnnnn 60
W--> 237 acuaygrnn 69
239 <210> SEQ ID NO: 11
240 <211> LENGTH: 69
241 <212> TYPE: RNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
246     synthetic construct
248 <220> FEATURE:
249 <221> NAME/KEY: misc_feature
250 <222> LOCATION: 1, 2, 10-17, 22, 25-31, 34, 40-46, 54-60, 68, 69

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251 <223> OTHER INFORMATION: n = g, a, c or u
253 <220> FEATURE:
254 <221> NAME/KEY: misc_feature
255 <222> LOCATION: 5, 18, 67
256 <223> OTHER INFORMATION: r = a or g
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <222> LOCATION: 65
261 <223> OTHER INFORMATION: y = c or u
263 <400> SEQUENCE: 11
W--> 264 nnucruauan nnnnnnnrau anggnnnnnn ngunucuacn nnnnnnccgu aaannnnnnn 60
W--> 265 auuaygrnn 69
267 <210> SEQ ID NO: 12
268 <211> LENGTH: 33
269 <212> TYPE: RNA
270 <213> ORGANISM: Artificial Sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
274     synthetic construct
276 <220> FEATURE:
277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: 12-17, 19-20, 25-33
279 <223> OTHER INFORMATION: n = g, a, c or u
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: 1, 11
284 <223> OTHER INFORMATION: r = a or g
287 <220> FEATURE:
288 <221> NAME/KEY: misc_feature
289 <222> LOCATION: 2
290 <223> OTHER INFORMATION: w = a or u
292 <220> FEATURE:
293 <221> NAME/KEY: misc_feature
294 <222> LOCATION: 8
295 <223> OTHER INFORMATION: h = a or c or u
297 <400> SEQUENCE: 12
W--> 298 rwagagghgc rnnnnnnnann aguannnnnnn nnn 33
300 <210> SEQ ID NO: 13
301 <211> LENGTH: 165
302 <212> TYPE: RNA
303 <213> ORGANISM: Bacillus subtilis
305 <400> SEQUENCE: 13
306 ggaaggacaa augaauaaag auuguauccu ucggggcagg guggaaaucc cgaccggcgg 60
307 uaguaaagca cauuugcuuu agagcccugug acccgugugc auaagcacgc gguggauuca 120
308 guuaaagcug aagccgacag ugaaagucug gaugggagaa ggaug 165
310 <210> SEQ ID NO: 14
311 <211> LENGTH: 128
312 <212> TYPE: RNA
313 <213> ORGANISM: Arabidopsis thaliana

```

FYI: Use of n and/or Xaa has been detected in the Sequence Listing.  
 Review the Sequence Listing to insure a corresponding  
 explanation is presented in the <220> to <223> fields of  
 each sequence using n or Xaa.